

## Daily Summary Report

Site: ORNL Sodar

3/10/2018

Interval: 015m

|       | 04_WS060m | 05_WDir060m | 06_WS100m | 07_WDir100m | 08_WS140m | 09_WDir140m | 10_WS180m | 11_WDir180m | 12_WS240m |
|-------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|
| Hour  | M/SEC     | DEG         | M/SEC     | DEG         | KPH       | DEG         | M/SEC     | DEG         | M/SEC     |
| 00:00 | .8        | 220.8       | 1.8       | 205.8       | 3.3       | 214.5       | 4.6       | 214.6       | 7.3       |
| 00:15 | 1.1       | 220.5       | 2.4       | 211.0       | 4.0       | 216.2       | 5.5       | 213.3       | 8.1       |
| 00:30 | 1.8       | 210.0       | 2.7       | 212.8       | 4.5       | 216.5       | 6.2       | 216.3       | 8.5       |
| 00:45 | 2.4       | 217.8       | 2.7       | 208.8       | 4.4       | 215.3       | 6.3       | 217.3       | 8.6       |
| 01:00 | 2.3       | 197.0       | 2.6       | 205.3       | 4.4       | 214.2       | 6.3       | 215.4       | 8.8       |
| 01:15 | 2.3       | 205.0       | 2.5       | 209.7       | 4.4       | 221.5       | 6.2       | 219.1       | 8.8       |
| 01:30 | 2.3       | 225.5       | 2.9       | 219.9       | 4.5       | 222.6       | 6.4       | 221.3       | 8.8       |
| 01:45 | 3.0       | 237.0       | 3.9       | 233.1       | 4.9       | 221.8       | 6.6       | 220.1       | 8.8       |
| 02:00 | 3.0       | 240.6       | 4.5       | 234.9       | 5.4       | 229.3       | 6.8       | 222.1       | 8.6       |
| 02:15 | 3.3       | 245.6       | 4.3       | 233.3       | 5.5       | 231.9       | 6.9       | 223.1       | 8.7       |
| 02:30 | 3.2       | 242.7       | 4.1       | 230.9       | 5.7       | 227.5       | 7.2       | 222.0       | 9.1       |
| 02:45 | 2.5       | 242.8       | 3.9       | 232.7       | 5.5       | 223.9       | 7.3       | 221.0       | 9.3       |
| 03:00 | 1.9       | 261.2       | 3.2       | 242.8       | 4.4       | 227.6       | 6.2       | 224.2       | 8.5       |
| 03:15 | 1.7       | 253.4       | 2.8       | 237.8       | 4.3       | 229.6       | 5.8       | 227.4       | 8.0       |
| 03:30 | 1.5       | 232.2       | 2.8       | 223.0       | 4.6       | 222.1       | 6.1       | 222.8       | 8.5       |
| 03:45 | 1.9       | 227.4       | 2.8       | 226.0       | 4.9       | 222.5       | 6.2       | 221.5       | 8.3       |
| 04:00 | 1.5       | 228.8       | 2.8       | 229.1       | 4.4       | 224.0       | 5.4       | 220.7       | 6.9       |
| 04:15 | .5        | 262.7       | 1.8       | 231.4       | 2.8       | 221.4       | 3.6       | 215.9       | 5.1       |
| 04:30 | .3        | 297.6       | 1.0       | 238.2       | 1.7       | 226.6       | 2.7       | 216.7       | 3.7       |
| 04:45 | .4        | 300.8       | 1.1       | 250.3       | 1.5       | 232.7       | 2.4       | 223.7       | 3.0       |
| 05:00 | .5        | 288.0       | 1.2       | 258.2       | 1.3       | 240.3       | 1.8       | 225.5       | 2.8       |
| 05:15 | .4        | 277.6       | 1.5       | 274.3       | 1.2       | 257.4       | 1.4       | 231.5       | 2.1       |
| 05:30 | .4        | 300.7       | 2.1       | 284.3       | 1.6       | 271.0       | 2.0       | 251.5       | 2.7       |
| 05:45 | .5        | 296.4       | 2.0       | 279.4       | 2.1       | 268.6       | 2.6       | 251.7       | 3.6       |
| 06:00 | .6        | 284.1       | 2.1       | 275.0       | 2.4       | 269.7       | 2.5       | 255.6       | 3.6       |
| 06:15 | .5        | 304.3       | 2.2       | 279.2       | 3.5       | 274.3       | 3.7       | 264.8       | 4.4       |
| 06:30 | 3.0       | 272.1       | 2.9       | 271.6       | 4.8       | 268.1       | 5.7       | 260.8       | 6.3       |
| 06:45 | 2.0       | 261.1       | 3.1       | 257.6       | 4.8       | 253.4       | 6.4       | 248.8       | 8.1       |
| 07:00 | 1.4       | 231.0       | 2.5       | 236.1       | 4.1       | 235.1       | 5.9       | 233.3       | 8.0       |
| 07:15 | 1.4       | 206.7       | 2.2       | 213.8       | 3.8       | 224.2       | 5.5       | 224.0       | 5.5       |
| 07:30 | .9        | 223.4       | 2.3       | 206.5       | 3.7       | 220.7       | 4.1       | 221.4       | 2.3       |
| 07:45 | 1.3       | 227.5       | 2.7       | 215.6       | 4.2       | 217.3       | 3.9       | 222.9       | 2.4       |
| 08:00 | 2.2       | 220.3       | 3.1       | 213.5       | 5.0       | 214.2       | 6.2       | 215.6       | 5.0       |
| 08:15 | 1.5       | 223.2       | 2.5       | 212.5       | 4.3       | 215.4       | 5.7       | 214.1       | 6.3       |
| 08:30 | .5        | 241.3       | 1.3       | 224.7       | 2.7       | 218.8       | 3.8       | 213.5       | 4.7       |
| 08:45 | .3        | 253.3       | .6        | 224.7       | 2.0       | 214.9       | 2.7       | 208.3       | 3.5       |
| 09:00 | .4        | 267.8       | .6        | 217.2       | 1.9       | 208.6       | 2.5       | 203.5       | 3.5       |
| 09:15 | .5        | 246.7       | .9        | 218.9       | 2.0       | 210.7       | 2.7       | 208.1       | 3.8       |
| 09:30 | .3        | 221.8       | 1.2       | 219.9       | 2.2       | 215.3       | 3.3       | 212.5       | 4.3       |
| 09:45 | .1        | 152.1       | 1.3       | 212.5       | 2.3       | 215.2       | 3.2       | 215.9       | 4.1       |
| 10:00 | .2        | 74.1        | 1.0       | 210.2       | 1.9       | 218.7       | 2.5       | 220.1       | 2.9       |
| 10:15 | .0        | 80.9        | 1.0       | 215.2       | 2.0       | 216.6       | 2.9       | 212.8       | 3.1       |
| 10:30 | .3        | 257.5       | 1.4       | 209.6       | 1.8       | 216.6       | 2.7       | 209.7       | 2.3       |
| 10:45 | .4        | 264.5       | 1.1       | 212.6       | 1.3       | 234.9       | 1.5       | 223.9       | 1.1       |
| 11:00 | .5        | 224.9       | 1.2       | 217.6       | 1.8       | 245.3       | 2.1       | 244.7       | 1.7       |
| 11:15 | 1.0       | 235.4       | 1.8       | 235.7       | 2.4       | 242.7       | 2.5       | 242.7       | 2.4       |
| 11:30 | 2.1       | 256.2       | 2.2       | 239.6       | 2.4       | 241.7       | 2.6       | 240.8       | 2.6       |
| 11:45 | 2.0       | 242.6       | 2.4       | 216.6       | 2.4       | 228.4       | 2.7       | 233.9       | 2.6       |
| 12:00 | .8        | 208.7       | 2.4       | 213.3       | 2.7       | 216.2       | 3.2       | 214.1       | 3.2       |
| 12:15 | .8        | 157.6       | 2.4       | 204.1       | 3.2       | 207.2       | 4.0       | 202.5       | 3.6       |



## Daily Summary Report

Site: ORNL Sodar

3/10/2018

Interval: 015m

|       | 13_WDir240m | 14_WS300m | 15_WDir300m | 16_WS400m | 17_WDir400m | 18_WS500m | 19_WDir500m | 20_WS600m | 21_WDir600m |
|-------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|
| Hour  | DEG         | M/SEC     | DEG         | M/SEC     | DEG         | M/SEC     | DEG         | M/SEC     | DEG         |
| 00:00 | 213.8       | 9.8       | 213.3       | 10.0      | 205.4       |           |             |           |             |
| 00:15 | 212.9       | 10.6      | 211.5       | 6.1       | 191.0       | .5        | 199.5       | 1.1       | 84.0        |
| 00:30 | 214.1       | 11.4      | 212.8       | 9.9       | 210.7       | 3.0       | 179.0       | 2.9       | 119.2       |
| 00:45 | 214.0       | 11.3      | 214.7       | 13.3      | 218.2       | 9.5       | 195.0       |           |             |
| 01:00 | 214.3       | 10.8      | 215.1       | 14.3      | 218.4       |           |             |           |             |
| 01:15 | 216.5       | 10.9      | 216.3       | 15.0      | 218.8       |           |             |           |             |
| 01:30 | 215.2       | 10.9      | 215.8       | 15.0      | 217.4       |           |             |           |             |
| 01:45 | 212.8       | 10.8      | 213.0       | 14.6      | 218.2       |           |             |           |             |
| 02:00 | 216.5       | 10.5      | 211.2       | 14.9      | 220.8       |           |             |           |             |
| 02:15 | 218.6       | 10.6      | 214.3       | 15.5      | 220.4       |           |             |           |             |
| 02:30 | 216.7       | 11.5      | 216.2       | 15.7      | 219.6       |           |             |           |             |
| 02:45 | 215.7       | 11.8      | 215.1       | 15.5      | 222.7       |           |             |           |             |
| 03:00 | 219.6       | 11.1      | 218.5       | 14.3      | 225.8       |           |             |           |             |
| 03:15 | 224.8       | 10.4      | 222.3       | 13.3      | 226.7       | 13.4      | 240.0       |           |             |
| 03:30 | 220.4       | 10.9      | 218.5       | 13.9      | 227.9       | 13.8      | 237.2       | 15.3      | 239.4       |
| 03:45 | 218.5       | 10.3      | 218.6       | 13.6      | 226.8       | 13.4      | 233.0       | 14.0      | 238.0       |
| 04:00 | 215.9       | 8.4       | 215.3       | 11.8      | 223.5       | 13.0      | 228.0       | 12.0      | 237.0       |
| 04:15 | 207.1       | 6.7       | 208.4       | 10.1      | 219.5       | 12.2      | 222.3       | 11.6      | 236.6       |
| 04:30 | 202.4       | 6.0       | 204.0       | 8.7       | 215.3       | 12.5      | 220.6       | 12.7      | 228.4       |
| 04:45 | 209.3       | 5.2       | 204.8       | 8.2       | 215.4       | 12.4      | 221.0       | 13.9      | 225.7       |
| 05:00 | 210.5       | 4.5       | 208.5       | 8.1       | 216.2       | 12.1      | 222.1       | 13.4      | 228.0       |
| 05:15 | 215.1       | 3.7       | 214.3       | 7.3       | 220.1       | 11.7      | 224.5       | 13.0      | 232.0       |
| 05:30 | 230.2       | 4.0       | 225.2       | 7.3       | 224.1       | 10.7      | 225.0       | 12.8      | 235.0       |
| 05:45 | 230.9       | 5.4       | 226.5       | 8.9       | 223.0       | 11.1      | 226.2       | 12.5      | 238.0       |
| 06:00 | 236.8       | 5.5       | 232.6       | 9.0       | 226.1       | 12.1      | 235.7       | 12.1      | 240.6       |
| 06:15 | 246.4       | 6.0       | 237.8       | 9.1       | 230.6       | 12.3      | 237.9       | 12.6      | 252.5       |
| 06:30 | 250.3       | 7.8       | 243.2       | 11.3      | 239.6       | 13.7      | 242.9       | 16.8      | 252.7       |
| 06:45 | 244.5       | 9.4       | 245.1       | 12.1      | 243.2       | 13.5      | 248.0       | 13.0      | 256.0       |
| 07:00 | 235.3       | 8.8       | 240.1       | 10.8      | 242.8       | 9.2       | 248.1       | 10.0      | 260.0       |
| 07:15 | 228.8       | 4.6       | 228.0       | 5.2       | 242.5       | 6.5       | 253.0       | 8.0       | 265.0       |
| 07:30 | 228.9       | 1.2       | 239.9       | .6        | 301.4       | 4.0       | 263.0       | 6.0       | 270.0       |
| 07:45 | 225.5       | 2.9       | 255.1       | 2.1       | 270.0       | 2.9       | 278.9       | 4.9       | 274.9       |
| 08:00 | 211.7       | 7.0       | 224.0       | 7.3       | 224.3       | 6.5       | 253.9       | 7.2       | 24.0        |
| 08:15 | 205.5       | 8.2       | 209.3       | 10.1      | 213.9       | 9.4       | 230.0       | 8.6       | 237.0       |
| 08:30 | 202.9       | 6.7       | 200.5       | 9.2       | 211.7       | 8.1       | 232.8       | 8.8       | 235.0       |
| 08:45 | 198.5       | 5.6       | 201.4       | 8.4       | 212.0       | 9.3       | 231.1       | 9.0       | 233.0       |
| 09:00 | 200.8       | 5.8       | 201.7       | 8.4       | 213.4       | 10.6      | 222.9       | 9.2       | 231.0       |
| 09:15 | 207.1       | 6.0       | 201.7       | 8.3       | 214.7       | 10.4      | 223.6       | 9.4       | 229.0       |
| 09:30 | 208.5       | 6.0       | 204.2       | 8.3       | 214.1       | 9.7       | 231.3       | 9.7       | 228.0       |
| 09:45 | 208.3       | 5.3       | 204.7       | 8.1       | 213.2       | 9.1       | 228.4       | 10.0      | 227.0       |
| 10:00 | 210.8       | 4.1       | 203.2       | 7.2       | 208.9       | 9.3       | 223.1       | 10.6      | 225.7       |
| 10:15 | 207.3       | 4.8       | 195.2       | 8.0       | 203.1       | 9.7       | 215.4       | 10.9      | 222.8       |
| 10:30 | 205.9       | 2.8       | 201.8       | 7.4       | 208.9       | 8.9       | 220.1       | 10.9      | 224.8       |
| 10:45 | 216.4       | 2.1       | 221.6       | 6.6       | 216.8       | 8.1       | 226.8       | 10.5      | 226.2       |
| 11:00 | 221.7       | 3.0       | 215.1       | 7.1       | 214.9       | 8.4       | 220.1       | 9.8       | 229.0       |
| 11:15 | 222.2       | 3.2       | 211.6       | 6.2       | 212.6       | 7.6       | 216.9       | 9.1       | 226.3       |
| 11:30 | 232.3       | 3.3       | 225.2       | 4.8       | 215.1       | 6.7       | 220.1       | 7.6       | 228.7       |
| 11:45 | 236.3       | 3.5       | 225.4       | 3.8       | 227.8       | 5.2       | 231.3       | 6.3       | 242.4       |
| 12:00 | 229.7       | 3.8       | 230.2       | 3.9       | 242.5       | 4.5       | 245.6       | 5.9       | 249.7       |
| 12:15 | 214.9       | 3.7       | 225.5       | 3.9       | 246.8       | 4.4       | 267.0       | 5.3       | 267.2       |



## Daily Summary Report

Site: ORNL Sodar

3/10/2018

Interval: 015m

|       | 22_WS700m | 23_WDir700m | 24_WS800m | 25_WDir800m | 26_WS900m | 27_WDir900m |
|-------|-----------|-------------|-----------|-------------|-----------|-------------|
| Hour  | M/SEC     | DEG         | M/SEC     | DEG         | M/SEC     | DEG         |
| 00:00 |           |             |           |             |           |             |
| 00:15 |           |             |           |             |           |             |
| 00:30 |           |             |           |             |           |             |
| 00:45 |           |             |           |             |           |             |
| 01:00 |           |             |           |             |           |             |
| 01:15 |           |             |           |             |           |             |
| 01:30 |           |             |           |             |           |             |
| 01:45 |           |             |           |             |           |             |
| 02:00 |           |             |           |             |           |             |
| 02:15 |           |             |           |             |           |             |
| 02:30 |           |             |           |             |           |             |
| 02:45 |           |             |           |             |           |             |
| 03:00 |           |             |           |             |           |             |
| 03:15 |           |             |           |             |           |             |
| 03:30 |           |             |           |             |           |             |
| 03:45 |           |             |           |             |           |             |
| 04:00 |           |             |           |             |           |             |
| 04:15 |           |             |           |             |           |             |
| 04:30 |           |             |           |             |           |             |
| 04:45 |           |             |           |             |           |             |
| 05:00 |           |             |           |             |           |             |
| 05:15 |           |             |           |             |           |             |
| 05:30 |           |             |           |             |           |             |
| 05:45 |           |             |           |             |           |             |
| 06:00 |           |             |           |             |           |             |
| 06:15 |           |             |           |             |           |             |
| 06:30 |           |             |           |             |           |             |
| 06:45 |           |             |           |             |           |             |
| 07:00 |           |             |           |             |           |             |
| 07:15 |           |             |           |             |           |             |
| 07:30 |           |             |           |             |           |             |
| 07:45 | 5.3       | 266.2       |           |             |           |             |
| 08:00 | 7.2       | 256.5       |           |             |           |             |
| 08:15 | 7.9       | 255.3       |           |             |           |             |
| 08:30 | 8.0       | 253.0       |           |             |           |             |
| 08:45 | 8.5       | 251.0       |           |             |           |             |
| 09:00 | 9.0       | 248.0       |           |             |           |             |
| 09:15 | 9.5       | 245.0       |           |             |           |             |
| 09:30 | 10.0      | 243.0       |           |             |           |             |
| 09:45 | 10.5      | 240.0       |           |             |           |             |
| 10:00 | 11.5      | 236.0       |           |             |           |             |
| 10:15 | 12.6      | 232.2       | 15.3      | 229.2       | 16.1      | 243.6       |
| 10:30 | 12.4      | 227.3       | 14.0      | 232.3       | 15.2      | 229.7       |
| 10:45 | 12.1      | 229.8       | 12.3      | 231.7       | 14.3      | 232.0       |
| 11:00 | 11.6      | 235.3       | 12.5      | 232.4       | 13.7      | 235.5       |
| 11:15 | 11.2      | 232.9       | 13.4      | 225.9       |           |             |
| 11:30 | 9.3       | 236.0       | 14.8      | 220.1       |           |             |
| 11:45 | 8.0       | 262.0       | 12.0      | 235.0       |           |             |
| 12:00 | 7.7       | 262.5       | 11.0      | 250.0       |           |             |
| 12:15 | 7.5       | 270.4       | 10.0      | 265.0       |           |             |

|            | 22_WS700m | 23_WDir700m | 24_WS800m | 25_WDir800m | 26_WS900m | 27_WDir900m |
|------------|-----------|-------------|-----------|-------------|-----------|-------------|
| Hour       | M/SEC     | DEG         | M/SEC     | DEG         | M/SEC     | DEG         |
| 12:30      | 7.0       | 282.4       | 9.0       | 285.0       |           |             |
| 12:45      | 6.3       | 300.9       | 8.4       | 310.8       |           |             |
| 13:00      | 4.4       | 294.0       | 7.6       | 306.5       |           |             |
| 13:15      | 3.9       | 261.6       | 7.5       | 300.0       |           |             |
| 13:30      | 4.5       | 253.0       | 7.3       | 294.0       |           |             |
| 13:45      | 5.0       | 244.0       | 7.2       | 288.0       |           |             |
| 14:00      | 5.8       | 235.1       | 7.2       | 275.0       |           |             |
| 14:15      | 4.9       | 238.6       | 7.0       | 265.0       |           |             |
| 14:30      | 4.5       | 234.3       | 7.0       | 250.0       |           |             |
| 14:45      | 5.4       | 223.3       | 6.8       | 235.0       |           |             |
| 15:00      | 5.3       | 222.0       | 6.1       | 229.9       |           |             |
| 15:15      | 5.7       | 219.0       | 5.9       | 230.1       |           |             |
| 15:30      | 7.5       | 211.8       |           |             |           |             |
| 15:45      | 8.5       | 214.4       |           |             |           |             |
| 16:00      | 8.4       | 215.0       |           |             |           |             |
| 16:15      | 8.3       | 215.0       |           |             |           |             |
| 16:30      | 8.2       | 215.0       |           |             |           |             |
| 16:45      | 8.1       | 215.0       |           |             |           |             |
| 17:00      | 8.0       | 215.0       |           |             |           |             |
| 17:15      | 7.9       | 215.0       |           |             |           |             |
| 17:30      | 7.8       | 215.0       |           |             |           |             |
| 17:45      | 7.7       | 215.0       |           |             |           |             |
| 18:00      | 7.6       | 215.0       |           |             |           |             |
| 18:15      | 7.5       | 215.0       |           |             |           |             |
| 18:30      | 7.4       | 215.0       |           |             |           |             |
| 18:45      | 7.3       | 215.0       |           |             |           |             |
| 19:00      | 7.3       | 215.0       |           |             |           |             |
| 19:15      | 7.2       | 215.0       |           |             |           |             |
| 19:30      | 7.2       | 215.0       |           |             |           |             |
| 19:45      | 7.1       | 215.0       |           |             |           |             |
| 20:00      | 7.1       | 216.0       |           |             |           |             |
| 20:15      | 7.0       | 216.0       |           |             |           |             |
| 20:30      | 7.0       | 216.0       |           |             |           |             |
| 20:45      | 6.9       | 216.0       |           |             |           |             |
| 21:00      | 6.9       | 216.0       |           |             |           |             |
| 21:15      | 6.8       | 216.0       |           |             |           |             |
| 21:30      | 6.8       | 216.0       |           |             |           |             |
| 21:45      | 6.7       | 216.0       |           |             |           |             |
| 22:00      | 6.7       | 216.0       |           |             |           |             |
| 22:15      | 6.6       | 216.0       |           |             |           |             |
| 22:30      | 6.5       | 216.0       |           |             |           |             |
| 22:45      | 6.5       | 216.0       |           |             |           |             |
| 23:00      | 6.5       | 216.0       |           |             |           |             |
| 23:15      | 6.4       | 216.0       |           |             |           |             |
| 23:30      | 6.4       | 216.3       |           |             |           |             |
| 23:45      |           |             |           |             |           |             |
| Avg        | 7.5       | 231.2       | 9.6       | 256.7       | 14.8      | 235.2       |
| Max        | 12.6      | 300.9       | 15.3      | 310.8       | 16.1      | 243.6       |
| Hr. of Max | 41        | 51          | 41        | 51          | 41        | 41          |
| Min        | 3.9       | 211.8       | 5.9       | 220.1       | 13.7      | 229.7       |
| Count      | 64        | 64          | 21        | 21          | 4         | 4           |
| Total      |           |             |           |             |           |             |